

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (ORIGINAL) Seed of soybean line designated 0509249, representative seed of said line having been deposited under ATCC Accession No. PTA-____.
2. (ORIGINAL) A soybean plant, or a part thereof, produced by growing the seed of claim 1.
3. (ORIGINAL) A tissue culture of regenerable cells produced from the plant of claim 2.
4. (ORIGINAL) Protoplasts produced from the tissue culture of claim 3.
5. (CURRENTLY AMENDED) The tissue culture of claim 3, wherein cells of the tissue culture are produced from a tissue selected from the group consisting of leaf, pollen, embryo, root, root tip, anther, pistil, flower, seed, pod, and stem.
6. (ORIGINAL) A soybean plant regenerated from the tissue culture of claim 3, said plant having all the morphological and physiological characteristics of line 0509249, representative seed of said line having been deposited under ATCC Accession No. PTA-_____.
7. (ORIGINAL) A method for producing an F1 hybrid soybean seed, comprising crossing the plant of claim 2 with a different soybean plant and harvesting the resultant F1 hybrid soybean seed.
- 8-9. (CANCELED)
10. (ORIGINAL) A method for producing a male sterile soybean plant comprising transforming the soybean plant of claim 2 with a nucleic acid molecule that confers male sterility.
11. (ORIGINAL) A male sterile soybean plant produced by the method of claim 10.
12. (ORIGINAL) A method of producing an herbicide resistant soybean plant

comprising transforming the soybean plant of claim 2 with a transgene that confers herbicide resistance.

13. (ORIGINAL) An herbicide resistant soybean plant produced by the method of claim 12.

14. (CURRENTLY AMENDED) The soybean plant of claim 13, wherein the transgene confers resistance to an herbicide selected from the group ~~consisting of~~: consisting of imidazolinone, sulfonyleurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

15. (ORIGINAL) A method of producing an insect resistant soybean plant comprising transforming the soybean plant of claim 2 with a transgene that confers insect resistance.

16. (ORIGINAL) An insect resistant soybean plant produced by the method of claim 15.

17. (ORIGINAL) The soybean plant of claim 16, wherein the transgene encodes a *Bacillus thuringiensis* endotoxin.

18. (ORIGINAL) A method of producing a disease resistant soybean plant comprising transforming the soybean plant of claim 2 with a transgene that confers disease resistance.

19. (ORIGINAL) A disease resistant soybean plant produced by the method of claim 18.

20-21. (CANCELED)

22. (ORIGINAL) A soybean plant, or part thereof, having all the physiological and morphological characteristics of the line 0509249, representative seed of said line having been deposited under ATCC Accession No. PTA-_____.

23-29. (CANCELED)

30. (NEW) A method of producing a soybean plant with modified fatty acid or carbohydrate metabolism wherein the method comprises transforming the soybean plant of claim 2 with one or more transgenes encoding a protein selected from the

group consisting of stearyl-ACP desaturase, fructosyltransferase, levansucrase, alphaamylase, invertase and starch branching enzyme.

31. (NEW) A soybean plant produced by the method of claim 30.

32. (NEW) A method of introducing a desired trait into soybean cultivar 0509249 wherein the method comprises:

- (a) crossing the 0509249 plants, representative seed deposited under ATCC Accession No. PTA-_____, with plants of another soybean line that comprise a desired trait to produce F1 progeny plants, wherein the desired trait is selected from the group consisting of male sterility, herbicide resistance, insect resistance and resistance to bacterial, fungal or viral disease;
- (b) selecting F1 progeny plants that have the desired trait to produce selected F1 progeny plants;
- (c) crossing the selected F1 progeny plants with the 0509249 plants to produce first backcross progeny plants;
- (d) selecting for first backcross progeny plants that have the desired trait and physiological and morphological characteristics of soybean cultivar 0509249 to produce selected first backcross progeny plants; and
- (e) repeating steps (c) and (d) two or more times in succession to produce selected second or higher backcross progeny plants that comprise the desired trait and all of the physiological and morphological characteristics of soybean cultivar 0509249 as described in the Variety Description Information and as determined at a 5% significance level when grown in the same environmental conditions.

33. (NEW) A plant produced by the method of claim 38, wherein the plant has the desired trait and all of the physiological and morphological characteristics of soybean cultivar 0509249 as described in the Variety Description Information and as determined at a 5% significance level when grown in the same environmental conditions.